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(54) Title: **NEW USE**

(57) Abstract: The use of h-TREK1 polypeptides and polynucleotides in the design of protocols for the treatment of epilepsy, sleep-related disorders, the induction of sleep, cognitive dysfunction/enhancement, attention deficit disorder, addiction, anxiety/phobia, dyskinesias including Parkinson's and Huntington's chorea, Cerebral palsy, incontinence, erectile dysfunction, alopecia, among others, and diagnostic assays for such conditions. Also disclosed are methods for producing such polypeptides by recombinant techniques.

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